

# Online Food Ordering System in Train

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## Abstract

The Online Food Ordering System for College Campuses is an Android-based application that allows students and faculty to conveniently order meals and snacks from various campus food outlets. This system addresses the issue of long queues and limited availability during peak hours by enabling users to place orders online and choose scheduled pickup or delivery options. Integrated with secure payment gateways and a real-time order tracking system, it enhances user convenience and operational efficiency. The project aims to streamline campus food services by digitalizing the ordering process and supporting both online payments and cash-on-delivery.

**Keywords:** Food Ordering, Online Shopping, Train Food, Cash on Delivery, HTML, SQL

## I.

### INTRODUCTION

The online food ordering system has become an essential service for train passengers in recent years, offering a convenient and hassle-free dining experience. The system provides a food menu online, which includes a variety of options to cater to different dietary needs and preferences, such as vegetarian, non-vegetarian, gluten-free, vegan, and low-calorie meals. Customers can easily place their orders online and track them using the system's tracking feature. The system also maintains a database of customer information to improve food delivery services. The service provider partners with local restaurants and mess facilities to offer passengers a wide range of food options, including meals, snacks, beverages, and desserts from popular food chains and local vendors. Passengers can place their orders well in advance, ensuring that their meals are prepared and delivered on time. The food is prepared by registered restaurants and delivered in secure packaging, ensuring quality and hygiene standards are maintained. The food delivery system for trains also contributes to the local economy by partnering with local businesses. Besides food, the service provider offers other amenities such as blankets, pillows, and reading materials to make the train journey more comfortable for passengers. Overall, the food delivery system for trains has become an indispensable service for train passengers, providing them with a comfortable and convenient dining experience while traveling. It eliminates the need for passengers to carry their own food, especially during long journeys, and ensures that the food is delivered to their seat with minimal disruption. The service has also contributed to the growth of local businesses and improved the overall train journey experience for passengers.

### Existing System & Disadvantages:

The reason why to choose this project is the idea behind project that is to solve problem of people which they are facing when they shift to different city. The system is not only for user but also for provider who provides food service. This system is for making efficient communication between consumer and producer of the food system which will then leads to the ideal and effective system. The online food ordering system sets up a food menu online and customers can easily place the order as per they like. Also, the online customers can easily track their orders. The management maintains customer's database, and improve food delivery service. This system also provides a feedback system in which user can rate the food items. Also, the proposed system can recommend hotels, food, based on the ratings given by the user, the hotel staff will be informed for the improvements along with the quality. The payment can be may online or cash or pay-on-delivery system. For more secured ordering separate accounts are maintained for each user by providing them an ID and a password.

The disadvantage is the menu choice. Mostly the menu choices are limited. If we stick to the system, for few months it will become repetitive.

One of the biggest disadvantages in online food ordering is the place or exact location of the Customer

### Propose System:

This is an android application which is designed to order the food online while travelling by train. While travelling a long distance by train the main problem we face is food. To overcome such a problem we want to develop a mobile application through which we are ordering the food online. If the person wants to order food he/her can directly order the food so that the food is delivered directly to your seat and the cash-on-delivery process takes place between the customer and the person who delivers the food to us from the particular restaurant which we order.

## II.

### LITERATURE SURVEY

The present online ordering food economy allow users to apply a single tap of their mobile phone or laptop order from a wide array of restaurants, so the team want to checking some literature to understanding in what reason online food delivery are quite important for people in this century. Online food ordering systems for train travel are becoming increasingly popular, allowing passengers to order meals online and have them delivered directly to their seats. In this literature review, we will examine several studies that have explored the benefits and challenges of online food ordering systems for train travel. One study by Kumar et al. (2018) investigated the effectiveness of an online food ordering system on Indian Railways. The study found that the system helped to improve the overall efficiency of food service on trains,

reducing waiting times and increasing passenger satisfaction. However, the study also found that there were several challenges to implementing the system, including technical issues and difficulties in coordinating with train staff. Another study by Jha et al. (2019) examined the factors that influence passenger satisfaction with online food ordering systems on Indian Railways. The study found that factors such as ease of use, speed of delivery, and food quality all significantly impacted passenger satisfaction. Additionally, the study found that passengers were more likely to use the online ordering system if they had prior experience with it and if they perceived it as being more convenient than traditional food service on trains. Overall, these studies suggest that online food ordering systems can be beneficial for passengers and train operators, improving efficiency, passenger satisfaction, and hygiene and safety. However, there are also challenges to implementing these systems, particularly in terms of technical issues and coordination with train staff. Further research is needed to fully understand the impact of online food ordering systems on train travel and to identify best practices for implementation.

**RAILWAY FOOD DELIEVERY SYSTEM** Authors: D.I.De Silva; June 22nd, 2023 based on the result of this research, it can be concluded: It helps customers in making order easily, It gives information needed in making order to customer. The Food website application made for restaurant and mess can help restaurant and mess in receiving orders and modifying its data and it is also made for admin so that it helps admin in controlling all the Food system.

**Food Order in Train** Authors: Rohit Suresh Sawant, 02 Feb 2020. Research work aims to design and develop a wireless food ordering system in the restaurant. Technical operations of Wireless Ordering System (WOS) including systems architecture, function, limitations and recommendations were presented in this system. By providing higher quality customer service and reducing human errors to improve the management aspect for restaurants, pervasive application will be a valuable tool due to the high demands of handheld devices such as PDAs.

**Survey on RAILWAY FOOD DELIVERY SYSTEM** Authors: Prof. Navya Srivastava, Nov1, 2019,. Based on the result of this research, it can be concluded: It helps customer in making order easily; It gives information needed in making order to customer. The Food website application made for restaurant and mess can help restaurant and mess in receiving orders and modifying its data and it is M; also made for admin so that it helps admin in controlling all the Food system. implemented the system “Real Time B1dus Tracking System”.

## METHODOLOGY

System Architecture/ Block Diagram

This application is having 2 major modules with their submodules:

- Seller Login
- Customer Login

**Seller Login:** Seller would be having a login account. He can see the customer order details like customer name, customer mobile no, customer meals order.

**Registration:** - Seller should register on the system. **Train Details:** - Seller will add the train number.

**Place Order:** - Seller will place the order to customer.

**Accept and deliver:** - Seller will accept and mark complete after the delivery of food. **Past order:** - Seller can see the details of past orders done.

**Customer Login:** Customer who is ordering the food must first create an account in the system by registering themselves and then can login into the account to begin with order.

**Register:** - Customer can register their details.

**Past order:** - Customer can see the past order details. **Order Food:** - Customer order food.

**Order Delivery:** - Customer will get his ordered food.

**Feedback:** - Customer can give their feedback about the whole process

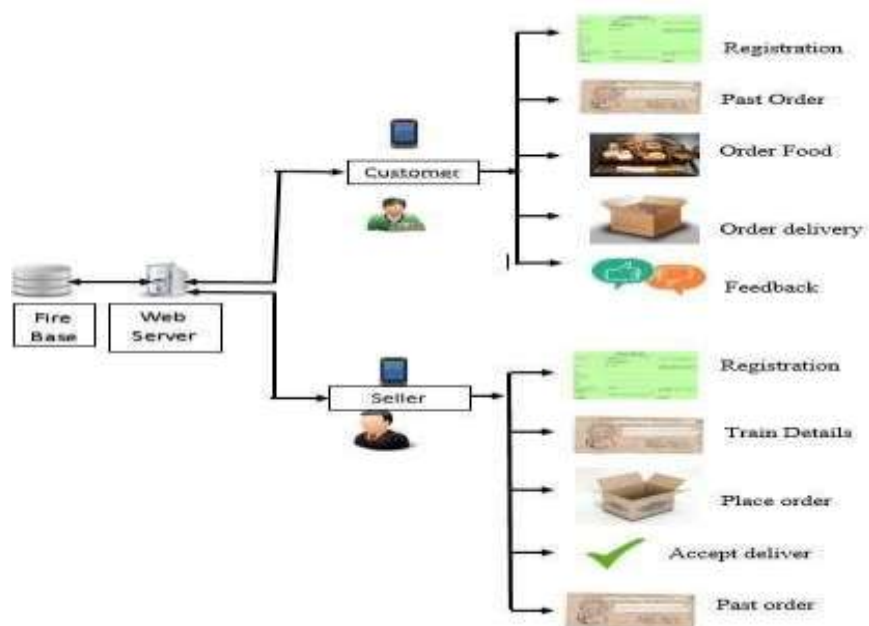


Fig. 1. Block Diagram/ System Architecture

### Detail Working

1. **Ordering:** Passengers can place their food orders through a mobile app or by contacting a designated phone number. The app or phone system will have a menu with various food options to choose from
2. **Payment:** Once the order is placed, passengers can make payment through the app using various payment methods such as credit/debit cards, mobile wallets, or cash on delivery.
3. **Order Processing:** The received orders are then forwarded to the on-board staff or external vendors responsible for preparing the food. They will start preparing the meals according to the specified preferences and requirements.
4. **Delivery:** Once the food is prepared, it is delivered to the respective passenger's seat. The delivery can be done by on board staff or dedicated food delivery personnel at designated stops.
5. **Feedback and Support:** Passengers may have the option to provide feedback on the quality of the food and service. In case of any issues or concerns, there may be a customer support system in place to address them

What makes a high-quality Web application design?

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization. Once the software requirements have been analysed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system. Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software.

### Detail of Project Design

A data flow diagram (DFD) is System design is the first step in software development, which needs careful and intricate planning. It helps us to prepare detailed technical design of the application-based system. It is based on Requirement Analysis. It provides the specification and design for system design showing flow of work, program and user functions. A data flow diagram (DFD) maps out the flow of information for any process or system. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination. Each process should have at least one input and an output. Each data store should have at least one data flow in and one data flow out. Data stored in a system must go through a process. All processes in a DFD go to another process or a data store.

### DFD Symbols

In the DFD, there are four symbols

A square defines a source (Originator) or destination of system data.

An arrow identifies data flow. It is the pipeline through which the information flows.

A circle or a bubble represents process that informs incoming data flow into outgoing data flows. An open rectangle is a data store, data at rest or a temporary repository of data.

### DFD Level 0

Shows The DFD serves two purposes

To provide an indication of how game is transformed as they move through the System. To depict the function and sub-functions that transforms the data.

They serve as basis for the functional as well as game flow modelling



Fig. 2. DFD Level0

### DFD Level 1

A data flow represents the flow of information, with its direction represented by an arrow head that shows at the end of flow connector. A process is a business activity or function where the manipulation and transformation of data takes place. A process can be decomposed to finer level of details, for representing how data is being processed within the process. An external entity can represent a human, system or subsystem. It is where certain data comes from or goes to. It is external to the system we study, in terms of the business process. For this reason, people used to draw external entities on the edge of a diagram. A data flow represents the flow of information, with its direction represented by an arrow head that shows at the end(s) of flow connector.

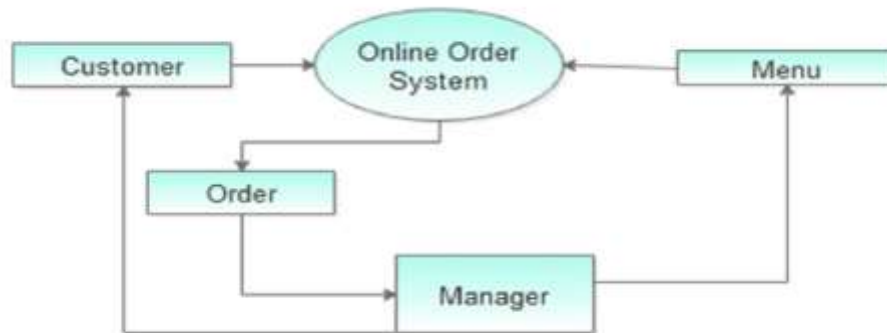


Fig. 3. DFT Level 1

### ER Diagram

An entity may be defined as a thing capable of an independent existence that can be uniquely identified. An entity is an abstraction from the complexities of a domain. When we speak of an entity, we normally speak of some aspect of the real world that can be distinguished from other aspects of the real world. An entity is a thing that exists either physically or logically. An entity may be a physical object such as a house or a car (they exist physically), an event such as a house sale or a car service, or a concept such as a customer transaction or order (they exist logically—as a concept). Although the term entity is the one most commonly used, following Chen we should really distinguish between an entity and an entity-type. An entity-type is a category. An entity, strictly speaking, is an instance of a given entity-type

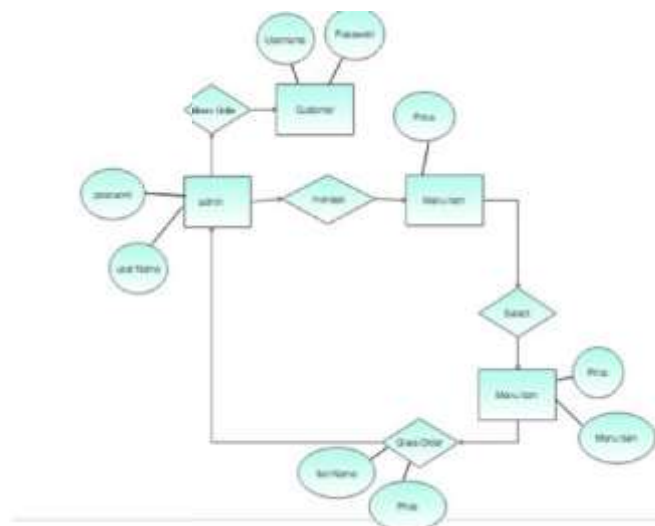


Fig. 4. ER Diagram

### III. CONCLUSION

We studied the efficient use of developing a Food Express Android application and making great use of it. We focused on the problems faced by the passengers who are travelling by train and developed this android application to overcome the causes affecting the people. We used these results to determine the usage of this application is very easy and everyone can make use of it by ordering their desired food at any place at any time.

### ACKNOWLEDGMENT

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